

> s page (P) templat? and attribu? and databata?

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118983 PAGE
24865 TEMPLAT?
605 PAGE (P) TEMPLAT?
111895 ATTRIBU?
0 DATABATA?
L1      0 PAGE (P) TEMPLAT? AND ATTRIBU? AND DATABATA?
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=> s page (P) templat? and attribu? and databas?

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118983 PAGE
24865 TEMPLAT?
605 PAGE (P) TEMPLAT?
111895 ATTRIBU?
19156 DATABAS?
L2      51 PAGE (P) TEMPLAT? AND ATTRIBU? AND DATABAS?
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=> s l2 and network

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149975 NETWORK
L3      34 L2 AND NETWORK
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=> s l3 and user

```
291601 USER
L4      34 L3 AND USER
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=> s l4 and layout (P) personal (P) page

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48326 LAYOUT
57544 PERSONAL
118983 PAGE
32 LAYOUT (P) PERSONAL (P) PAGE
L5      0 L4 AND LAYOUT (P) PERSONAL (P) PAGE
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=> s l4 and layout (P) page

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48326 LAYOUT
118983 PAGE
1112 LAYOUT (P) PAGE
L6      9 L4 AND LAYOUT (P) PAGE
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=> d 1-9

1. 5,878,421, Mar. 2, 1999, Information map; Patrick J. Ferrel, et al., 707/100, 1, 2, 3, 101, 104 [IMAGE AVAILABLE]

2. 5,870,552, Feb. 9, 1999, Method and apparatus for publishing hypermedia documents over wide area networks; Linda T. Dozier, et al., 707/501 [IMAGE AVAILABLE]

3. 5,864,871, Jan. 26, 1999, Information delivery system and method including on-line entitlements; Eduard Kitain, et al., 707/104, 9, 10 [IMAGE AVAILABLE]

4. 5,860,073, Jan. 12, 1999, Style sheets for publishing system; Patrick J. Ferrel, et al., 707/522, 513, 516, 526 [IMAGE AVAILABLE]

5. 5,819,250, Oct. 1998, Method and system for multimedia interaction with a **database**; Terry F. Trader, et al., 707/1; 395/500 [IMAGE AVAILABLE]

6. 5,787,414, Jul. 28, 1998, Data retrieval system using secondary information of primary data to be retrieved as retrieval key; Seiji Miike, et al., 707/2, 3, 5 [IMAGE AVAILABLE]

7. 5,734,915, Mar. 31, 1998, Method and apparatus for composing digital medical imagery; Paul H. Roewer, 707/512 [IMAGE AVAILABLE]

8. 5,257,363, Oct. 26, 1993, Computer-aided generation of programs modelling complex systems using colored petri nets; Robert M. Shapiro, et al., 395/500; 364/188, 191, 976.5, DIG.2 [IMAGE AVAILABLE]

9. 5,128,878, Jul. 7, 1992, Remote plotting of integrated circuit layout in a **network** computer-aided design system; Brooklin J. Gore, et al., 345/502; 364/917.96, 927.8, 929.3, 940, 940.61, 940.64, 949.91, 962, DIG.2 [IMAGE AVAILABLE]

=> d ab 2

US PAT NO: 5,870,552 [IMAGE AVAILABLE]

L6: 2 of 9

ABSTRACT:

The present invention addresses the critical needs of publishers seeking to create and publish hypermedia content in electronic form across wide area networks ("WAN's") such as the World Wide Web. Toward this end, a client-server development platform is provided for handling the important functions of document authoring, content-based indexing and retrieval of documents, management and control of proprietary assets, and support for developing form-driven interactive services, all in a manner that is uniquely and seamlessly WAN-integrated.

=> d his

(FILE 'USPAT' ENTERED AT 15:24:53 ON 19 APR 1999)

L1 0 S PAGE (P) TEMPLAT? AND ATTRIBU? AND DATABATA?
L2 51 S PAGE (P) TEMPLAT? AND ATTRIBU? AND DATABAS?
L3 34 S L2 AND NETWORK
L4 34 S L3 AND USER
L5 0 S L4 AND LAYOUT (P) PERSONAL (P) PAGE
L6 9 S L4 AND LAYOUT (P) PAGE

=> s l6 and personal (P) page

57544 PERSONAL
118983 PAGE
1030 PERSONAL (P) PAGE
L7 2 L6 AND PERSONAL (P) PAGE

=> d 1-2

1. 5,878,421, Mar. 2, 1999, Information map; Patrick J. Ferrel, et al., 707/100, 1, 2, 3, 101, 104 [IMAGE AVAILABLE]

2. 5,860,073, Jan. 12, 1999, Style sheets for publishing system; Patrick J. Ferrel, et al., 707/522, 513, 516, 526 [IMAGE AVAILABLE]

=> d ab 1-2

ABSTRACT:

One of the controls on a page can call an information map at the time that the page which contains the control is being rendered. The information map interface provides access to the structure of both the title and the content within the title. The control can then display this structural information in any form it desires since it renders itself on the page at the customer computer. Navigation through the title is based on the customer's interactions with the information map control, i.e., clicking on a navigation link causes the title to navigate to that location. The information map determines which piece of the title and content structure to show, and the visual form in which it is shown. Information maps may have other applications including the efficient creation and modification of timelines and geographic maps in multimedia encyclopedias (e.g., Microsoft Encarta), as well as virtual reality programs.

US PAT NO: 5,860,073 [IMAGE AVAILABLE]

L7: 2 of 2

ABSTRACT:

The use of style sheets in an electronic publishing system is described. A style sheet is a collection of formatting information, such as font and tabs in a textual document. The style sheets described herein are applied to individual display regions (controls) on a page. Unlike previous systems, the display regions in this system do not contain any text at the time the style sheet is applied. Rather, the text, or other media such as graphics, is poured into the display region when the title is rendered on the customer's computer.

=> d kwic 1, 2

US PAT NO: 5,878,421 [IMAGE AVAILABLE]

L7: 1 of 2

SUMMARY:

BSUM(11)

The . . . Manager in Microsoft Windows or the Explorer in Windows 95 provide such a capability. In such a system, when a **user** activates a file, by clicking on a mouse, the application program associated with the file is started by the operating. . .

SUMMARY:

BSUM(12)

Many . . . publications can be used to disseminate information to a variety of customers. A number of programs exist for allowing a **user** to design complicated layouts for a particular application. Well-known programs such as Microsoft Publisher.RTM., Ventura Publisher.RTM., PageMaker.RTM., and PrintShop.RTM. help a **user** to produce attractive newsletters and brochures.

SUMMARY:

BSUM(13)

Another . . . Language (HTML). Both the HTML and SGML are standards for tagging text in documents to be displayed in an on-line **network**. Documents that are formatted in HTML or SGML can be viewed by several widely distributed browsers such as Mosaic and. . .

SUMMARY:

BSUM(14)

Several . . . producing documents that are tagged in either the SGML and HTML format. Programs such as Interleaf's WorldView 2 allow a **user** to create an SGML document with, for instance, bold-face text and hyperlinks to other documents. A hyperlink, also known as a navigation link, is a **user** selectable portion of a screen display which, when activated by a **user** event such as a mouse click, causes the viewing program to navigate to another portion of the displayed document.

SUMMARY:

BSUM(15)

Once . . . not reformat these tagged documents, but rather only display the commands embedded in the SGML or HTML documents to a **user**. For this reason, the designers that produce the SGML and HTML documents must add navigation links to every new document.. . .

SUMMARY:

BSUM(20)

The . . . renders itself on the page), and can use the same interface to cause navigation through the title based on the **user's** interactions with the outline control (i.e. clicking on a particular piece of the structure would cause the title to navigate. . . a reference to a particular location, displays that location on the map, and causes navigation to that story when the **user** clicks on the location. It also enables 3-D "virtual reality" navigation, timelines, and an arbitrary set of other possible displays. . . .

SUMMARY:

BSUM(22)

In . . . electronic publication system including a designer, a storage and a viewer, a method comprising the steps of creating a title **layout** including at least one **page** object; creating a content object having a plurality of content values; releasing the title **layout** and the content object as a title to the storage; retrieving the title **layout** and the content object from the storage; composing an outline of navigational links on the displayable **page** representation of the **page** object, the outline representative of the title **layout** and the content values; and moving through the title by activation of one of the navigational links.

DRAWING DESC:

DRWD(4)

(FILE 'USPAT' ENTERED AT 15:24:53 ON 19 APR 1999)
L1 0 S PAGE (P) TEMPLAT? AND ATTRIBU? AND DATABATA?
L2 51 S PAGE (P) TEMPLAT? AND ATTRIBU? AND DATABAS?
L3 34 S L2 AND NETWORK
L4 34 S L3 AND USER
L5 0 S L4 AND LAYOUT (P) PERSONAL (P) PAGE
L6 9 S L4 AND LAYOUT (P) PAGE
L7 2 S L6 AND PERSONAL (P) PAGE

=> s page (P) templat?

118983 PAGE
24865 TEMPLAT?
L8 605 PAGE (P) TEMPLAT?

=> s 18 and layout

48326 LAYOUT
L9 75 L8 AND LAYOUT

=> s 19 and databas?

19156 DATABAS?
L10 35 L9 AND DATABAS?

=> focus

PROCESSING COMPLETED FOR L10
L11 35 FOCUS L10 1-

=> d 1-35

1. 5,892,900, Apr. 6, 1999, Systems and methods for secure transaction management and electronic rights protection; Karl L. Ginter, et al., 713/200 [IMAGE AVAILABLE]

2. 5,708,825, Jan. 13, 1998, Automatic summary page creation and hyperlink generation; Bernardo Rafael Sotomayor, 707/501 [IMAGE AVAILABLE]

3. 5,625,776, Apr. 29, 1997, Electronic proposal preparation system for selling computer equipment and copy machines; Jerome D. Johnson, 705/27, 24, 29; 707/104 [IMAGE AVAILABLE]

4. 5,615,342, Mar. 25, 1997, Electronic proposal preparation system; Jerome D. Johnson, 705/27, 24, 29 [IMAGE AVAILABLE]

5. 5,493,490, Feb. 20, 1996, Electronic proposal preparation system for selling vehicles; Jerome D. Johnson, 705/26; 235/376; 705/37; 707/104 [IMAGE AVAILABLE]

6. 4,570,217, Feb. 11, 1986, Man machine interface; Bruce S. Allen, et al., 364/188, 191, 921.4, 921.8, 921.9, 926, 926.9, 926.92, 927.3, 927.4, 928, 929.2, 929.3, 935, 935.2, 935.4, 935.41, 940.61, 940.62, 941, 949, 949.3, 959.1, 968, 969, 969.1, 977, DIG.2 [IMAGE AVAILABLE]

7. 5,864,871, Jan. 25, 1999, Information delivery system and method including on-line entitlements; Eduard Kitain, et al., 707/104, 9, 10 [IMAGE AVAILABLE]
8. 5,465,361, Nov. 7, 1995, Microcode linker/loader that generates microcode sequences for MRI sequencer by modifying previously generated microcode sequences; John C. Hoenninger, III, 395/710; 324/309, 312; 364/DIG.1; 395/500 [IMAGE AVAILABLE]
9. 5,758,072, May 26, 1998, Interactive computer network and method of operation; Robert Filepp, et al., 395/200.5; 709/217 [IMAGE AVAILABLE]
10. 5,682,524, Oct. 28, 1997, Databank system with methods for efficiently storing non-uniform data records; Gregor P. Freund, et al., 711/5 [IMAGE AVAILABLE]
11. 5,809,497, Sep. 15, 1998, Databank system with methods for efficiently storing non uniform data records; Gregor P. Freund, et al., 707/2 [IMAGE AVAILABLE]
12. 5,347,632, Sep. 13, 1994, Reception system for an interactive computer network and method of operation; Robert Filepp, et al., 395/200.32; 364/228.4, 246.3, 284.4, DIG.1 [IMAGE AVAILABLE]
13. 5,890,175, Mar. 30, 1999, Dynamic generation and display of catalogs; Garland Wong, et al., 707/505; 705/26 [IMAGE AVAILABLE]
14. 5,819,271, Oct. 6, 1998, Corporate information communication and delivery system and method including entitlable hypertext links; John J. Mahoney, et al., 707/9, 10, 104 [IMAGE AVAILABLE]
15. 5,594,910, Jan. 14, 1997, Interactive computer network and method of operation; Robert Filepp, et al., 395/800.28; 364/242.94, 243, 284, 284.4, 286.3, DIG.1 [IMAGE AVAILABLE]
16. 5,845,302, Dec. 1, 1998, Method and system for producing high-quality, highly-personalized printed documents; Theodore F. Cyman, Jr., et al., 707/517, 520, 539 [IMAGE AVAILABLE]
17. 5,860,073, Jan. 12, 1999, Style sheets for publishing system; Patrick J. Ferrel, et al., 707/522, 513, 516, 526 [IMAGE AVAILABLE]
18. 5,787,414, Jul. 28, 1998, Data retrieval system using secondary information of primary data to be retrieved as retrieval key; Seiji Miike, et al., 707/2, 3, 5 [IMAGE AVAILABLE]
19. 5,819,250, Oct. 6, 1998, Method and system for multimedia interaction with a **database**; Terry F. Trader, et al., 707/1; 395/500 [IMAGE AVAILABLE]
20. 5,795,228, Aug. 18, 1998, Interactive computer-based entertainment system; Douglas Trumbull, et al., 463/42 [IMAGE AVAILABLE]
21. 5,765,142, Jun. 9, 1998, Method and apparatus for the development and implementation of an interactive customer service system that is dynamically responsive to change in marketing decisions and environments; Scott K. Allred, et al., 705/26; 395/701 [IMAGE AVAILABLE]
22. 5,634,091, May 27, 1997, Digital page imaging system; Gerald K. Sands, et al., 395/117; 101/453 [IMAGE AVAILABLE]
23. 5,128,878, Jul. 7, 1992, Remote plotting of integrated circuit **layout** in a network computer-aided design system; Brooklin J. Gore, et al., 345/502; 364/917.96, 927.8, 929.3, 940, 940.61, 940.64, 949.91, 962, DIG.2 [IMAGE AVAILABLE]

24. 5,878,421, Mar. 1999, Information map; Patrick J. Ferrel, et al., 707/100, 1, 2, 3, 101; 104 [IMAGE AVAILABLE]

25. 5,870,552, Feb. 9, 1999, Method and apparatus for publishing hypermedia documents over wide area networks; Linda T. Dozier, et al., 707/501 [IMAGE AVAILABLE]

26. 5,734,915, Mar. 31, 1998, Method and apparatus for composing digital medical imagery; Paul H. Roewer, 707/512 [IMAGE AVAILABLE]

27. 5,860,075, Jan. 12, 1999, Document data filing apparatus for generating visual attribute values of document data to be filed; Tatsuo Hashizume, et al., 707/530; 382/190, 286, 306; 707/6 [IMAGE AVAILABLE]

28. 5,317,646, May 31, 1994, Automated method for creating templates in a forms recognition and processing system; Henry W. Sang, Jr., et al., 382/175; 345/441; 382/217, 282; 707/506 [IMAGE AVAILABLE]

29. 5,305,396, Apr. 19, 1994, Data processing system and method for selecting customized character recognition processes and coded data repair processes for scanned images of document forms; Timothy S. Betts, et al., 382/175, 310 [IMAGE AVAILABLE]

30. 5,381,489, Jan. 10, 1995, Optical character recognition method and apparatus; Philip Bernzott, et al., 382/176, 209, 229 [IMAGE AVAILABLE]

31. 5,170,426, Dec. 8, 1992, Method and system for home incarceration; Frederick D. D'Alessio, et al., 379/38; 340/505, 539, 573.4, 825.54; 379/49 [IMAGE AVAILABLE]

32. 5,257,363, Oct. 26, 1993, Computer-aided generation of programs modelling complex systems using colored petri nets; Robert M. Shapiro, et al., 395/500; 364/188, 191, 976.5, DIG.2 [IMAGE AVAILABLE]

33. 5,251,294, Oct. 5, 1993, Accessing, assembling, and using bodies of information; Daniel H. Abelow, 707/512; 345/967 [IMAGE AVAILABLE]

34. 5,642,435, Jun. 24, 1997, Structured document processing with lexical classes as context; Keith Loris, 382/229, 224 [IMAGE AVAILABLE]

35. 5,583,949, Dec. 10, 1996, Apparatus and method for use in image processing; Raymond W. Smith, et al., 382/199, 203 [IMAGE AVAILABLE]

=> d kwic 19

US PAT NO: 5,819,250 [IMAGE AVAILABLE] L11: 19 of 35
TITLE: Method and system for multimedia interaction with a
database

ABSTRACT:

A method and system for interacting with a **database** via multiple types of media where the **database** includes data lacking a format for use with each of the media. The method includes selecting data to be accessed, . . .

SUMMARY:

BSUM(2)

This invention relates to a method and system for interacting with a **database** via a plurality of media.

SUMMARY:

BSUM(4)

A wide variety of media exist for accessing and interacting with **database** stored information. Such media include telephone, television, computers, facsimile machines, and hearing impaired devices for providing output of such data. . . .

SUMMARY:

BSUM(5)

Current methods and system for providing such access and interaction, however, require that information stored in the **database** be replicated and copied for each type of media output employed. That is, each screen, document or other type of. . . well as the overall amount of storage required to deliver multiple media output. As a result, information stored on most **databases** is available for access and interaction via only a limited number of media types.

SUMMARY:

BSUM(6)

A need therefore exists for an improved method and system for multimedia interaction with a **database** which would solve the problem of having to re-create and store data assets for each media type. Such a method. . . eliminate the production time and storage requirement problems of the prior art, while allowing for real time interaction with the **database**.

SUMMARY:

BSUM(8)

Accordingly, . . . is the principle object of the present invention to provide an improved method and system for multimedia interaction with a **database**.

SUMMARY:

BSUM(9)

According to the present invention, then, a method and system are provided for interacting with a **database** via a plurality of media. The **database** has data lacking a format for use with each of the plurality of media. The method of the present invention. . .

DETDESC:

DETD(2)

Referring . . . unit (16), a video processing unit (18), operator workstations (20), administration and data entry terminals (22), other electronic information services **database** systems (24), a centralized management maintenance system (26), and national information providers (28).

DETDESC:

DETD(4)

Generally, . . . devices, such as fax subsystem (14), audio response unit (16), and video processing unit (18), include appropriate software for formatting **database** information for immediate delivery via any

type of interactive media product including telephone, fax, television, computer, print, and terminals for. . .

DETDESC:

DETD(5)

More . . . of the system of the present invention is shown. As seen therein, fax server (40) is provided in communication with **database** server (42). As the result of a **database** query from **database** server (42), various image (44), text (46), and graphic (48) data elements are gathered and transmitted to fax server (40).

DETDESC:

DETD(6)

Database server (42) includes a fax composing program, or **templates**. Using that **template**, such elements are placed on a "page" based on rules and **page** geometry definitions. Depending upon the media specified, the attributes of the **template** may include the necessary processing for static hard-copy output to full-motion animation and/or audio. After output definitions are established in. . . method and system of the present invention can automatically produce hard-copy, video and/or audio output relying on configuration files and **database** queries, thereby reducing production time and permitting real time interaction with a **database**.

DETDESC:

DETD(7)

Once a **template** is laid out for each particular media type, the method and system automatically place data into the right places on that media. For example, among other things, a **template** for a printed document may indicate picture location, text location, and **page** breaks. Similarly, a **template** for a television application may indicate background color, text location, the timing for audio, and the timing for moving from one screen to the next. A **template** for audiotex may indicate the timing for audio. The system and method thereby reduce the overall amount of data storage. . .

DETDESC:

DETD(8)

Fax . . . in communication with fax system (50). Once the data elements (44, 46, 48) have been properly formatted via the fax **template** of **database** server (42), fax system (50) transmits the actual fax output (52), which may have images and text including a cover **page** and a **page** footer.

=> d 1-19

1. 5,893,111, Apr. 6, 1999, Ad taking pagination information system; Paul A. Sharon, Jr., et al., 707/104, 100 [IMAGE AVAILABLE]
2. 5,870,030, Feb. 9, 1999, Advertiser pays information and messaging system and apparatus; Michael J. DeLuca, et al., 340/825.44; 235/375; 340/825.34, 825.35, 825.47; 379/56.1 [IMAGE AVAILABLE]
3. 5,857,193, Jan. 5, 1999, Centralized audiotext polling system; Andrew B. Sutcliffe, et al., 707/10; 395/185.07; 455/427; 704/278; 705/14; 707/1, 8, 104, 200, 201, 202, 203, 204 [IMAGE AVAILABLE]
4. 5,848,396, Dec. 8, 1998, Method and apparatus for determining behavioral profile of a computer user; Thomas A. Gerace, 705/10; 455/6.2; 705/1 [IMAGE AVAILABLE]
5. 5,818,836, Oct. 6, 1998, Method and apparatus for anonymous voice communication using an online data service; Stephen C. DuVal, 370/389, 352, 392; 379/88.2, 204 [IMAGE AVAILABLE]
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8. 5,799,320, Aug. 25, 1998, Remote multiple-user editing system and method; John R. Klug, 707/201, 540; 709/204 [IMAGE AVAILABLE]
9. 5,740,549, Apr. 14, 1998, Information and advertising distribution system and method; James P. Reilly, et al., 705/14 [IMAGE AVAILABLE]
10. 5,717,374, Feb. 10, 1998, Methods and apparatus for inputting messages, including advertisements, to a vehicle; Harry F. Smith, 340/438; 235/384; 340/825.33, 825.34, 825.35; 706/45 [IMAGE AVAILABLE]
11. 5,703,995, Dec. 30, 1997, Method and system for producing a personalized video recording; George M. Willbanks, 386/52, 56 [IMAGE AVAILABLE]
12. 5,422,624, Jun. 6, 1995, Methods and apparatus for inputting messages, including advertisements, to a vehicle; Harry F. Smith, 340/438; 320/109; 324/434; 340/439 [IMAGE AVAILABLE]
13. 5,383,296, Jan. 24, 1995, Flexible display banner; Elizabeth J. Vecchione, et al., 40/604, 612 [IMAGE AVAILABLE]
14. 5,299,521, Apr. 5, 1994, Bumper protector for a watercraft; Jerry T. Loucks, 114/219 [IMAGE AVAILABLE]
15. 5,292,154, Mar. 8, 1994, Method and materials for calendar fabrication renewal; Larry M. Williams, 283/2; 40/107 [IMAGE AVAILABLE]
16. 5,176,099, Jan. 5, 1993, Antenna ball for vehicle identification;

17. 4,951,945, Aug. 28, 1990, Plastic golf tee; Robert M. Gamble, 473/400, 402 [IMAGE AVAILABLE]

18. 4,781,231, Nov. 1, 1988, Protective heatshield kit for vehicle doors; Kenneth M. Garcia, et al., 224/42.11, 543; 280/770; 296/37.13 [IMAGE AVAILABLE]

19. 4,679,691, Jul. 14, 1987, Three-sided tip tray; Kevin J. Halloran, 206/557; 40/323, 324; 206/0.8 [IMAGE AVAILABLE]

=> d ab 10

US PAT NO: 5,717,374 [IMAGE AVAILABLE]

L12: 10 of 19

ABSTRACT:

Methods and apparatus are disclosed for inputting messages and other information, such as advertisements, to a vehicle while the vehicle is coupled to a local station, such as a recharging station or a refueling station. The messages can be selected in accordance with information received from the vehicle, including information that selectively identifies one, some, or all of: (a) a characteristic of an occupant of the vehicle (e.g., name, account number, address, etc.); (b) a characteristic of the vehicle (e.g., make, model, year, class, registration number, marker number, odometer reading, owner, etc.); (c) a destination of the vehicle (entered through a data entry console and optionally stored within a vehicle memory); and (d) any other characteristic of interest.

=> d ab 8, 9

US PAT NO: 5,799,320 [IMAGE AVAILABLE]

L12: 8 of 19

ABSTRACT:

The user of any of a plurality of personal computers linked over an analog or digital network is able to edit a file in one of the personal computers. This one personal computer is a personal computer capable of multi-tasking which effectively permits multi-user access to the file. The host personal computer effectively performs polling of the remote personal computers for input to be added to the file or functions to be performed on the file. In the analog configuration, the personal computers use high-speed modems and data compression/decompression techniques.

US PAT NO: 5,740,549 [IMAGE AVAILABLE]

L12: 9 of 19

ABSTRACT:

In summary, the present invention is an information and advertising distribution system. A data server stores and updates a database of information items and advertisements. The information items and advertisements are each categorized so that each has an associated information category. Workstations remotely located from the data server each include a display device, a communication interface for receiving at least a subset of the information items and advertisements in the data server's database and local memory for storing the information items and advertisements received from the data server. An information administrator in each workstation establishes communication with the data server from time to time so as to update the information items and advertisements stored in local memory with at least a subset of the information items and advertisements stored by the data server. An information display controller in each workstation displays on the

workstation's display device at least a subset of the information items and advertisements stored in local memory when the workstation meets predefined idleness criteria. At least a subset of the workstations include a profiler for storing subscriber profile data. The subscriber profile data represents subscriber information viewing preferences, indicating information categories for which the subscriber does and does not want to view information items. The information display controller includes a filter for excluding from the information items displayed on the display device those information items inconsistent with the subscriber profile data.

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(FILE 'USPAT' ENTERED AT 15:24:53 ON 19 APR 1999)
L1          0 S PAGE (P) TEMPLAT? AND ATTRIBU? AND DATABATA?
L2          51 S PAGE (P) TEMPLAT? AND ATTRIBU? AND DATABAS?
L3          34 S L2 AND NETWORK
L4          34 S L3 AND USER
L5          0 S L4 AND LAYOUT (P) PERSONAL (P) PAGE
L6          9 S L4 AND LAYOUT (P) PAGE
L7          2 S L6 AND PERSONAL (P) PAGE
L8          605 S PAGE (P) TEMPLAT?
L9          75 S L8 AND LAYOUT
L10         35 S L9 AND DATABAS?
L11         35 FOCUS L10 1-
L12         19 S PERSONAL (4A) ADVERTISEMEN?
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=> s l12 and web

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109479 WEB
L13         5 L12 AND WEB
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=> d 1-5

1. 5,893,111, Apr. 6, 1999, Ad taking pagination information system; Paul A. Sharon, Jr., et al., 707/104, 100 [IMAGE AVAILABLE]
2. 5,857,193, Jan. 5, 1999, Centralized audiotext polling system; Andrew B. Sutcliffe, et al., 707/10; 395/185.07; 455/427; 704/278; 705/14; 707/1, 8, 104, 200, 201, 202, 203, 204 [IMAGE AVAILABLE]
3. 5,848,396, Dec. 8, 1998, Method and apparatus for determining behavioral profile of a computer user; Thomas A. Gerace, 705/10; 455/6.2; 705/1 [IMAGE AVAILABLE]
4. 5,809,242, Sep. 15, 1998, Electronic mail system for displaying advertisement at local computer received from remote system while the local computer is off-line the remote system; David E. Shaw, et al., 395/200.47 [IMAGE AVAILABLE]
5. 5,740,549, Apr. 14, 1998, Information and advertising distribution system and method; James P. Reilly, et al., 705/14 [IMAGE AVAILABLE]

=> d kwic 1

US PAT NO: 5,893,111 [IMAGE AVAILABLE] L13: 1 of 5

DETDESC:

DETD(2)

Referring to FIG. 1, a network 10 is shown for receiving **personal**

advertisements ("personals"), storing the personals and storing responses to the personals. While the present invention is described with particular reference to. . .

DETDESC:

DETD(14)

The . . . a router 60, as shown. Personal ads placed via the call centers 16.sub.1 -16.sub.t may be posted on a client's web site via the server 54 through corresponding communication link 52. Alternatively, personal ads may be posted directly onto the Internet.. . .

DETDESC:

DETD(55)

In . . . form of a hard copy, on a computer diskette or may be downloaded to the client or to a client's web site via the Internet.

=> d ab 1

US PAT NO: 5,893,111 [IMAGE AVAILABLE]

L13: 1 of 5

ABSTRACT:

A network on which personal ads are stored for distribution to a client includes at least one call center on which the personal ads are entered, at least one ad response machine on which responses to the ads are stored and an ad taking system including a processor and a database. The database includes an identifier of each client, the text of the personal ads to be distributed to each client and a profile of each client. The client profile includes a list of personal ad parameters and a weight associated with each such parameter. Ads are distributed to the client in an order based on the weight assigned to each parameter applicable to the ad. In accordance with one aspect of the invention, the weights are verified with statistics of the productivity of recently published ads in eliciting responses, with such statistics being obtained over the network from an ad response machine servicing the client. In accordance with a further aspect of the invention, at least one box pool for each client is stored in the database and includes box numbers and security codes available for advertisers to access ad responses and the processor is operative to ensure that a predetermined minimum number of box numbers and security codes remain available for each client.

=> d ccls, date 1

US PAT NO: 5,893,111 [IMAGE AVAILABLE]
US-CL-CURRENT: 707/104, 100

L13: 1 of 5

TITLE: Ad taking pagination information system

US PAT NO: 5,893,111 [IMAGE AVAILABLE] DATE ISSUED: Apr. 6, 1999

APPL-NO: 08/876,007 DATE FILED: Jun. 13, 1997

=> d kwic 9

5 ANSWERS ARE AVAILABLE. SPECIFIED ANSWER NUMBER EXCEEDS ANSWER SET SIZE
ENTER ANSWER NUMBER OR RANGE (1):end

=> d kwic 4

SUMMARY:

BSUM(12)

Some . . . advertisements are shown on part of the screen to users of the America Online network. When accessing certain World Wide **Web** sites on the Internet, advertisements are often included as part of the **web** page seen by the user. Often in such systems, each user accessing a certain screen or site is shown the . . .

SUMMARY:

BSUM(13)

When using a browser program (such as Netscape's Navigator program) to access pages on the World Wide **Web**, information, which may include advertisements, may be downloaded and cached at a user's computer. This information can be flushed from. . . cases, this information may be flushed when the browser program is "off-line." However, advertisements are not automatically replaced in a **web** page and new, unseen advertisements are not displayed as part of a **web** page when in such disconnected mode.

SUMMARY:

BSUM(16)

Advertisers . . . of relevant consumers who are actually exposed to the advertisement. For prior on-line systems and networks, including the World Wide **Web**, it is often difficult for an advertiser to precisely determine whether its advertisements were actually viewed by a user and. . .

SUMMARY:

BSUM(20)

In a representative embodiment of the present invention, a "mostly disconnected," highly scalable, client-server architecture is provided for the delivery of **personal** communications and **advertisements**. The representative embodiment provides higher performance than existing systems, and consequently lower costs per user.

SUMMARY:

BSUM(43)

Unlike . . . connection immediately when new data is required (such as in a system utilizing a browser program to access World Wide **Web** pages), the present invention will delay all server requests until a connection is actually established by the user. The present. . .

SUMMARY:

BSUM(50)

Moreover, . . . billed for the multiple viewings of the advertisement. This is in sharp contrast to advertisements displayed on the World Wide **Web**, where a user may visit a **web** site many times but because of caching functions of most **web** browsers, the advertiser is unaware that the advertisement has been viewed more than once. Further, **web** advertisers at present have no way of determining for

how long the advertisement was displayed to the user. Thus, the integrated targeted advertisement system of the present invention provides a number of advantages over web-based systems. According to the present invention, users willingly identify themselves and their consumer interests, and make user verification possible. Furthermore, . . .

DETDESC:

DETD(124)

It . . . be adapted to output a series of advertisements to users in a system that allowed downloading of a number of web pages for off-line browsing. In general, the present invention could be utilized wherever digital content is downloaded to a user. . . .

=> d date 5

TITLE:	Information and advertising distribution system and method	L13: 5 of 5
US PAT NO:	5,740,549	DATE ISSUED: Apr. 14, 1998
	[IMAGE AVAILABLE]	
APPL-NO:	08/489,591	DATE FILED: Jun. 12, 1995

=> d kwic, ab, ti, ccls, date 5

US PAT NO:	5,740,549 [IMAGE AVAILABLE]	L13: 5 of 5
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SUMMARY:

BSUM(7)

Up . . . Internet, and include advertisements along with information content. In fact, some newspapers sell advertising space on an associated World Wide Web (WWW) site, which often includes extensive listings of certain types of advertisements such as real estate **advertisements**, **personal advertisements**, and so on. Similarly, the scroll bar type advertisement at the bottom of a computer screen is based on similar. . . .

DETDESC:

DETD(14)

Finally, . . . advertisement the user has interacted with, such as by "clicking" on the advertisement to connect to the advertiser's World Wide Web page. News item display statistics 149 concern how much time the subscriber spent viewing each non-advertising item in the data. . . .

DETDESC:

DETD(68)

When . . . mode, if subscriber user clicks on an advertisement, the subscriber's computer is automatically connected to the an associated World Wide Web page on the Internet that provides additional information from the advertiser. This is accomplished by World Wide Web connection and viewer procedures 211 (see FIG. 2) stored on subscriber's computer. Each advertisement is stored on both the information. . . . a list of static images (such as corporate logos and legends), if any, incorporated into the advertisement, and (C) a Web site address that is used by the World Wide Web connection and viewer procedures 211 to connect the subscriber to the advertiser's specified

Web page when the subscriber clicks on the image of the associated advertisement.

DETDESC:

DETD(74)

When . . . if subscriber user clicks on the displayed advertisement, the subscriber's computer is automatically connected to the an associated World Wide **Web** page on the Internet that provides additional information from the advertiser.

CLAIMS:

CLMS(15)

15. . . . method as recited in claim 14 wherein if the advertising information is selected, the computer further automatically connects to a **Web** page on the network corresponding to the selected advertising information.

CLAIMS:

CLMS(18)

18. The computer-implemented method as recited in claim 1 wherein the network is the World Wide **Web**.

ABSTRACT:

In summary, the present invention is an information and advertising distribution system. A data server stores and updates a database of information items and advertisements. The information items and advertisements are each categorized so that each has an associated information category. Workstations remotely located from the data server each include a display device, a communication interface for receiving at least a subset of the information items and advertisements in the data server's database and local memory for storing the information items and advertisements received from the data server. An information administrator in each workstation establishes communication with the data server from time to time so as to update the information items and advertisements stored in local memory with at least a subset of the information items and advertisements stored by the data server. An information display controller in each workstation displays on the workstation's display device at least a subset of the information items and advertisements stored in local memory when the workstation meets predefined idleness criteria. At least a subset of the workstations include a profiler for storing subscriber profile data. The subscriber profile data represents subscriber information viewing preferences, indicating information categories for which the subscriber does and does not want to view information items. The information display controller includes a filter for excluding from the information items displayed on the display device those information items inconsistent with the subscriber profile data.

TITLE: Information and advertising distribution system and method
US-CL-CURRENT: 705/14

TITLE: Information and advertising distribution system and method
US PAT NO: 5,740,549 DATE ISSUED: Apr. 14, 1998
[IMAGE AVAILABLE]
APPL-NO: 08/489,591 DATE FILED: Jun. 12, 1995

=> d his

(FILE 'USPAT' ENTERED AT 15:24:53 ON 19 APR 1999)

L2 51 S PAGE (P) TEMPLAT? AND ATTRIBU? AND DATABAS?
 L3 34 S L2 AND NETWORK
 L4 34 S L3 AND USER
 L5 0 S L4 AND LAYOUT (P) PERSONAL (P) PAGE
 L6 9 S L4 AND LAYOUT (P) PAGE
 L7 2 S L6 AND PERSONAL (P) PAGE
 L8 605 S PAGE (P) TEMPLAT?
 L9 75 S L8 AND LAYOUT
 L10 35 S L9 AND DATABAS?
 L11 35 FOCUS L10 1-
 L12 19 S PERSONAL (4A) ADVERTISEMEN?
 L13 5 S L12 AND WEB

=> s l13 and userr

1 USERR
 L14 0 L13 AND USERR

=> s l13 and user

291601 USER
 L15 5 L13 AND USER

=> d 1-5

1. 5,893,111, Apr. 6, 1999, Ad taking pagination information system; Paul A. Sharon, Jr., et al., 707/104, 100 [IMAGE AVAILABLE]
2. 5,857,193, Jan. 5, 1999, Centralized audiotext polling system; Andrew B. Sutcliffe, et al., 707/10; 395/185.07; 455/427; 704/278; 705/14; 707/1, 8, 104, 200, 201, 202, 203, 204 [IMAGE AVAILABLE]
3. 5,848,396, Dec. 8, 1998, Method and apparatus for determining behavioral profile of a computer **user**; Thomas A. Gerace, 705/10; 455/6.2; 705/1 [IMAGE AVAILABLE]
4. 5,809,242, Sep. 15, 1998, Electronic mail system for displaying advertisement at local computer received from remote system while the local computer is off-line the remote system; David E. Shaw, et al., 395/200.47 [IMAGE AVAILABLE]
5. 5,740,549, Apr. 14, 1998, Information and advertising distribution system and method; James P. Reilly, et al., 705/14 [IMAGE AVAILABLE]

=> d kwic 5

US PAT NO: 5,740,549 [IMAGE AVAILABLE]

L15: 5 of 5

SUMMARY:

BSUM(4)

Another . . . scrolled text at the bottom of a television of computer screen, where the main program occupies most of the end **user**'s visual field and a smaller portion is occupied by advertisements and the like on a "scroll bar" or similar visual. . . .

SUMMARY:

BSUM(6)

Most, and perhaps all such examples of mixing advertisements with information content are based on systems in which the end **user** has actively elected to view or listen to a program or to otherwise receive information. Furthermore, in virtually all such. . .

SUMMARY:

BSUM(7)

Up . . . Internet, and include advertisements along with information content. In fact, some newspapers sell advertising space on an associated World Wide **Web** (WWW) site, which often includes extensive listings of certain types of advertisements such as real estate **advertisements**, **personal advertisements**, and so on. Similarly, the scroll bar type advertisement at the bottom of a computer screen is based on similar. . .

SUMMARY:

BSUM(16)

Another goal of the present invention is provide each subscriber with the ability to set up and change a **user** profile indicating categories and subcategories of topics which are of interest and not of interest to the subscriber, and to. . .

DRAWING DESC:

DRWD(6)

FIG. 4 schematically depicts a **user** profile data structure stored in a subscriber's computer to store status and configuration information for a particular subscriber and workstation.

DRAWING DESC:

DRWD(7)

FIG. 5 schematically depicts the dialog box used to define the **user** profile for one information category.

DETDESC:

DETD(6)

The . . . central processing unit 110, primary memory 112 (i.e., fast random access memory) and secondary memory 114 (typically disk storage), a **user** interface 116, an Internet interface 118 for communication with the client computers 102 via the Internet 119, and one or . . . and various sports news feeds. An information editor 130 is used, typically under the direction of a person using the **user** interface 116, to select news stories received from the new feeds and to edit and format the news stories into. . .

DETDESC:

DETD(14)

Finally, . . . for displaying during data viewer usage, a display count for other display instances, and an indication of each advertisement the **user** has interacted with, such as by "clicking" on

the advertisement to connect to the advertiser's World Wide Web page. News item display statistics 149 concern how much time the subscriber spent viewing each non-advertising item in the data. . . .

DETDESC:

DETD(18)

The . . . central processing unit 170, primary memory 172 (i.e., fast random access memory) and secondary memory 174 (typically disk storage), a **user** interface 176, and an Internet interface 178 for communication with the information server 104 via the Internet 119. In this. . . .

DETDESC:

DETD(20)

The . . . the workstation's secondary memory depends on the amount of secondary memory available for storing such information, as well as a **user** profile 194 for the subscriber that indicates which categories and subcategories of news stories are of interest to the subscriber.

DETDESC:

DETD(29)

The profiler 206 is actually a set of procedures that define and update the subscriber's **user** profile 194. Referring to FIG. 4, in the preferred embodiment, the **user** profile 194 includes:

DETDESC:

DETD(37)

screen . . . category and the last displayed advertisement and news items in each information category are stored in a portion of the **user** profile 194 not transmitted to the information server; and

DETDESC:

DETD(40)

In . . . (A) during the subscriber's typical lunch time, or (B) once per day when the subscriber's computer has not received any **user** input for a specified minimum period of time (e.g., ten minutes) that indicates the subscriber is away from his/her computer.

DETDESC:

DETD(41)

The . . . images), fixed images used by display scripts, and software modules is preferably performed during the night or long periods of **user** inactivity because images and software modules are typically much larger than the news items, which are primarily text data. Images, . . .

DETDESC:

DETD(43)

The . . . 208 can be executed at the subscriber's explicit command, and can also be launched from the screen saver if the, **user** indicates he/she wants to read a news story shown in the screen saver display. This is explained in more detail. . . .

DETDESC:

DETD(44)

The . . . many times each news item has been displayed in the same time period. These display statistics are stored in the **user** profile 194 at 218. In the preferred embodiment, the advertisement display statistics, and news items display statistics, are transferred to. . .

DETDESC:

DETD(46)

As . . . example, the Sports Definition Profile dialog box 222 includes, on the left side, a scroll box 223 in which the **user** can select and deselect subcategories of sports information by clicking on boxes next to the listed subcategories. A "Select All". . . category. For each subcategory, either an "include only" or an "exclude" filter (but not both) can be defined where the **user** types in key words to be used to select (for the include only) or deselect news items within that subcategory.. . .

DETDESC:

DETD(53)

The . . . time can be defined by either typing in an X,Y, or by selecting a box representing the sprite with the **user** interface and then moving it to a position on a simulated display screen 236. The size specification for the sprite. . .

DETDESC:

DETD(59)

In . . . of criteria as are used by other types of screen saver procedures. Generally, whenever the system detects a lack of **user** inputs via either keyboard or pointer device (e.g., a mouse or trackball) for a **user** configurable or otherwise specified length of time (e.g., 5 minutes), the screen saver procedures of the present invention begin the. . .

DETDESC:

DETD(60)

More . . . so on until news stories and an advertisement have been displayed in all the information categories indicated in the subscriber's **user** profile 194 as being of interest to the subscriber, at which point the process repeats with the first information category.

DETDESC:

DETD(65)

. . .
Select the NN next news items (SNI)
from queue of news items for the selected information category.
Update **User** Profile to indicate the last selected information
category, and to indicate for the selected information category,
the selected. . .

DETDESC:

DETD(66)

Each . . . category and the last displayed advertisement and news items in each information category are stored in a portion of the **user** profile 194 not transmitted to the information server.

DETDESC:

DETD(67)

Execution . . . display is returned to whatever was being displayed before the Screen Saver was executed, upon detection of certain types of **user** input. In the preferred embodiment, the **user** can use the profiler to select one of at least two exit modes: in a first mode, the Screen Saver procedure is terminated by hitting any key on the subscriber computer's **user** interface keyboard or by moving the **user** interface's mouse or trackball; in a second mode, the Screen Saver procedure is terminated by hitting any key on the subscriber computer's **user** interface keyboard, but movement of the mouse or trackball does not cause the Screen Saver procedure to terminate. Rather, in. . .

DETDESC:

DETD(68)

When using the second screen saver exit mode, if subscriber **user** clicks on an advertisement, the subscriber's computer is automatically connected to the an associated World Wide **Web** page on the Internet that provides additional information from the advertiser. This is accomplished by World Wide **Web** connection and viewer procedures 211 (see FIG. 2) stored on subscriber's computer. Each advertisement is stored on both the information. . . a list of static images (such as corporate logos and legends), if any, incorporated into the advertisement, and (C) a **Web** site address that is used by the World Wide **Web** connection and viewer procedures 211 to connect the subscriber to the advertiser's specified **Web** page when the subscriber clicks on the image of the associated advertisement.

DETDESC:

DETD(72)

Each . . . component. Furthermore, in client computers with very limited hard disk space available for storing news items, as indicated by the **user** profile 194 for the client computer, the secondary component of news items may not be stored in the local information. . .

DETDESC:

DETD(74)

When using the data viewer, if subscriber **user** clicks on the displayed advertisement, the subscriber's computer is automatically connected to the an associated World Wide **Web** page on the Internet that provides additional information from the advertiser.

DETDESC:

DETD(81)

The client computer then sends a portion of its **user** profile to the assigned application server. If an administrative update is being requested, the locally accumulated advertising display statistics 218. . .

DETDESC:

DETD(82)

Based on the time of day and the information in the transmitted **user** profile, the application server determines (A) what type of update is to be performed (i.e., a news item update or. . .

DETD(82):

DETD(85)

In . . . saver procedures filter out news items in the LAN server's local information database that are not consistent with each subscriber's **user** profile, thereby showing each subscriber only the subset of news items corresponding to the subscriber's **user** profile. In the preferred embodiments, the subscriber level news item filtering is accomplished by setting up the subscriber's data access tables 186 to include only news items corresponding to the subscriber's **user** profile. In the computers of stand alone subscribers, the filtering of news stories is handled during the data download process, by only downloading news items corresponding to the subscriber's **user** profile.

DETD(85):

(FILE 'USPAT' ENTERED AT 15:24:53 ON 19 APR 1999)

L1 0 S PAGE (P) TEMPLAT? AND ATTRIBU? AND DATABATA?
L2 51 S PAGE (P) TEMPLAT? AND ATTRIBU? AND DATABAS?
L3 34 S L2 AND NETWORK
L4 34 S L3 AND USER
L5 0 S L4 AND LAYOUT (P) PERSONAL (P) PAGE
L6 9 S L4 AND LAYOUT (P) PAGE
L7 2 S L6 AND PERSONAL (P) PAGE
L8 605 S PAGE (P) TEMPLAT?
L9 75 S L8 AND LAYOUT
L10 35 S L9 AND DATABAS?
L11 35 FOCUS L10 1-
L12 19 S PERSONAL (4A) ADVERTISEMEN?
L13 5 S L12 AND WEB
L14 0 S L13 AND USERR
L15 5 S L13 AND USER

=> s web and advertis? and user and page and databas? and page (P) templat?

109479 WEB
14481 ADVERTIS?
291601 USER
118983 PAGE
19156 DATABAS?
118983 PAGE
24865 TEMPLAT?
605 PAGE (P) TEMPLAT?
L16 11 WEB AND ADVERTIS? AND USER AND PAGE AND DATABAS? AND PAGE (P)
P)
TEMPLAT?

=> d 1-11

1. 5,892,900, Apr. 6, 1999, Systems and methods for secure transaction management and electronic rights protection; Karl L. Ginter, et al., 713/200 [IMAGE AVAILABLE]
2. 5,890,175, Mar. 30, 1999, Dynamic generation and display of catalogs; Garland Wong, et al., 707/505; 705/26 [IMAGE AVAILABLE]
3. 5,878,421, Mar. 2, 1999, Information map; Patrick J. Ferrel, et al., 707/100, 1, 2, 3, 101, 104 [IMAGE AVAILABLE]
4. 5,870,552, Feb. 9, 1999, Method and apparatus for publishing hypermedia documents over wide area networks; Linda T. Dozier, et al., 707/501 [IMAGE AVAILABLE]
5. 5,864,871, Jan. 26, 1999, Information delivery system and method including on-line entitlements; Eduard Kitain, et al., 707/104, 9, 10 [IMAGE AVAILABLE]
6. 5,860,073, Jan. 12, 1999, Style sheets for publishing system; Patrick J. Ferrel, et al., 707/522, 513, 516, 526 [IMAGE AVAILABLE]
7. 5,845,302, Dec. 1, 1998, Method and system for producing high-quality, highly-personalized printed documents; Theodore F. Cyman, Jr., et al., 707/517, 520, 539 [IMAGE AVAILABLE]

8. 5,819,271, Oct. 1998, Corporate information communication and delivery system and method including entitlable hypertext links; John J. Mahoney, et al., 707/9, 10, 104 [IMAGE AVAILABLE]

9. 5,819,092, Oct. 6, 1998, Online service development tool with fee setting capabilities; Charles H. Ferguson, et al., 395/701; 705/39 [IMAGE AVAILABLE]

10. 5,778,367, Jul. 7, 1998, Automated on-line information service and directory, particularly for the world wide web; Ralph E. Wesinger, Jr., et al., 707/10; 709/203, 204, 217, 218 [IMAGE AVAILABLE]

11. 5,649,186, Jul. 15, 1997, System and method for a computer-based dynamic information clipping service; Gregory J. Ferguson, 707/10, 3, 501, 513, 533 [IMAGE AVAILABLE]

=> d date 1-11

L16: 1 of 11

TITLE: Systems and methods for secure transaction management and electronic rights protection
US PAT NO: 5,892,900 DATE ISSUED: Apr. 6, 1999
[IMAGE AVAILABLE]
APPL-NO: 08/706,206 DATE FILED: Aug. 30, 1996

L16: 2 of 11

TITLE: Dynamic generation and display of catalogs
US PAT NO: 5,890,175 DATE ISSUED: Mar. 30, 1999
[IMAGE AVAILABLE]
APPL-NO: 08/719,561 DATE FILED: Sep. 25, 1996

L16: 3 of 11

TITLE: Information map
US PAT NO: 5,878,421 DATE ISSUED: Mar. 2, 1999
[IMAGE AVAILABLE]
APPL-NO: 08/503,139 DATE FILED: Jul. 17, 1995

L16: 4 of 11

TITLE: Method and apparatus for publishing hypermedia documents over wide area networks
US PAT NO: 5,870,552 DATE ISSUED: Feb. 9, 1999
[IMAGE AVAILABLE]
APPL-NO: 08/412,981 DATE FILED: Mar. 28, 1995

L16: 5 of 11

TITLE: Information delivery system and method including on-line entitlements
US PAT NO: 5,864,871 DATE ISSUED: Jan. 26, 1999
[IMAGE AVAILABLE]
APPL-NO: 08/789,768 DATE FILED: Jan. 28, 1997
REL-US-DATA: Continuation-in-part of Ser. No. 658,966, Jun. 4, 1996, and Ser. No. 739,377, Oct. 29, 1996.

L16: 6 of 11

TITLE: Style sheets for publishing system
US PAT NO: 5,860,073 DATE ISSUED: Jan. 12, 1999
[IMAGE AVAILABLE]
APPL-NO: 08/503,452 DATE FILED: Jul. 17, 1995

L16: 7 of 11

TITLE: Method and system for producing high-quality, highly-personalized printed documents
US PAT NO: 5,845,302 DATE ISSUED: Dec. 1, 1998

[IMAGE AVAILABLE]
APPL-NO: 08/58,41 DATE FILED: Dec. 29, 1995
L16: 8 of 11
TITLE: Corporate information communication and delivery system
and method including entitlable hypertext links
US PAT NO: 5,819,271 DATE ISSUED: Oct. 6, 1998
[IMAGE AVAILABLE]
APPL-NO: 08/739,377 DATE FILED: Oct. 29, 1996
REL-US-DATA: Continuation-in-part of Ser. No. 658,966, Jun. 4, 1996.

L16: 9 of 11
TITLE: Online service development tool with fee setting
capabilities
US PAT NO: 5,819,092 DATE ISSUED: Oct. 6, 1998
[IMAGE AVAILABLE]
APPL-NO: 08/944,365 DATE FILED: Oct. 6, 1997
REL-US-DATA: Continuation of Ser. No. 336,300, Nov. 8, 1994, abandoned.

L16: 10 of 11
TITLE: Automated on-line information service and directory,
particularly for the world wide **web**
US PAT NO: 5,778,367 DATE ISSUED: Jul. 7, 1998
[IMAGE AVAILABLE]
APPL-NO: 08/572,543 DATE FILED: Dec. 14, 1995

L16: 11 of 11
TITLE: System and method for a computer-based dynamic information
clipping service
US PAT NO: 5,649,186 DATE ISSUED: Jul. 15, 1997
[IMAGE AVAILABLE]
APPL-NO: 08/511,832 DATE FILED: Aug. 7, 1995

=> d kwic, ti 10, 5, 4, 3, 1

US PAT NO: 5,778,367 [IMAGE AVAILABLE] L16: 10 of 11
TITLE: Automated on-line information service and directory,
particularly for the world wide **web**

ABSTRACT:

A computer network and a **database** are used to provide a hardware-independent, dynamic information system in which the information content is entirely **user**-controlled. Requests are received from individual users of the computer network to electronically publish information, and input is accepted from the. . . users. Entries from the users containing the information to be electronically published are automatically collected, classified and stored in the **database** in searchable and retrievable form. Entries are made freely accessible on the computer network. In response to **user** requests, the **database** is searched and entries are retrieved. Entries are served to users in a hardware-independent **page** description language. The entries are password protected, allowing users to retrieve and update entries by supplying a correct password. Preferably, the process is entirely automated with any necessary billing being performed by secure, on-line credit card processing. The **user** making a **database** entry has complete control of that entry both at the time the entry is made and in the future after the entry has been made. The entry, when served to a client, is transformed on-the-fly to the **page** description language. Where the **page** description language is HTML and the computer network is the World Wide **Web**, the entry may function as a "mini" homepage for the **user** that made the entry. Provision is made for graphics and other kinds of content besides text, taking advantage of the content-rich nature of the **Web**.

SUMMARY:

BSUM(3)

The present invention relates to on-line services, particularly to services for the World Wide **Web**.

SUMMARY:

BSUM(5)

The Internet, and in particular the content-rich World Wide **Web** ("the **Web**"), have experienced and continue to experience explosive growth. The **Web** is an Internet service that organizes information using hypermedia. Each document can contain embedded reference to images, audio, or other documents. A **user** browses for information by following references. **Web** documents are specified in HyperText Markup Language (HTML), a computer language used to specify the contents and format of a hypermedia document (e.g., a homepage). HyperText Transfer Protocol (HTTP) is the protocol used to access a **Web** document.

SUMMARY:

BSUM(6)

Part of the beauty of the **Web** is that it allows for the definition of device-, system-, and application-independent electronic content. The details of how to display or play back that content on a particular machine within a particular software environment are left to individual **web** browsers. The content itself, however, need only be specified once. In some sense, then, the **Web** offers the ultimate in cross-platform capability.

SUMMARY:

BSUM(7)

Pre-existing collections of information, however, such as **databases** of various kinds, can rarely be placed directly on the **Web**. Rather, gateway programs are used to provide access to a wide variety of information and services that would otherwise be inaccessible to **Web** clients and servers. The Common Gateway Interface (CGI) specification has emerged as a standard way to extend the services and capabilities of a **Web** server having a defined core functionality. CGI "scripts" are used for this purpose. CGI provides an Application Program Interface, supported by CGI-capable **Web** servers, to which programmers can write to extend the functionality of the server. CGI scripts in large part produce from non-HTTP objects HTTP objects that a **Web** client can render, and also produce from HTTP objects non-HTTP input to be passed on to another program or a separate server, e.g., a conventional **database** server. More information concerning the CGI specification may be accessed using the following Universal Resource Locator (URL): <http://hoohoo.ncsa.uiuc.edu/cgi/interfac.html>